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PREDICTION OF LEFT VENTRICULAR MASS (LVM) IN THE ELDERLY BY CASUAL MEASUREMENT AND AMBULATORY BLOOD PRESSURE MONITORING (ABPM)

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Ambulatory blood pressure monitoring (ABPM) is a useful tool for the evaluation of blood pressure (BP) in hypertensive patients. However, it is not always feasible in elderly people due to the high prevalence of comorbidities. In this study, we compared the results of casual blood pressure (BP) measurement with those obtained by ABPM in a group of elderly patients (ages 65-80 years).

Methods: We recruited 50 elderly patients (30 men, 20 women) with a mean age of 72 years (SD 6). All patients were enrolled in the study after giving informed consent. Blood pressure was measured in the morning and afternoon on three consecutive days using an oscillometric monitor. ABPM was performed using a 24-hour monitor with a cuff size adjusted to the patient's arm circumference. BP was recorded every 30 minutes.

Results: The mean casual systolic blood pressure (SBP) was 145 mmHg (SD 22) and the mean casual diastolic blood pressure (DBP) was 90 mmHg (SD 9). The mean ABPM SBP was 138 mmHg (SD 18) and the mean ABPM DBP was 80 mmHg (SD 9). The mean LVM index was 135 g/m^2 (SD 30) for casual BP measurement and 130 g/m^2 (SD 25) for ABPM. The correlation coefficient between casual SBP and LVM was 0.54 (p<0.01) and between ABPM SBP and LVM was 0.70 (p<0.01).

Conclusion: ABPM is a more accurate method for the prediction of LVM in elderly patients compared to casual BP measurement. It is recommended for the evaluation of BP in this population.